

## LISTING OF PENDING CLAIMS

1. (previously presented) A method for adjusting a noise floor of a filtered signal for low frequencies, the method comprising:
  - providing a digital signal, having M bits, that has been digitally filtered, where M is a selected positive number;
  - forming an EXclusive OR product of N least significant bits (LSBs) of the M-bit filtered signal, to provide a one-bit supplement signal, where N is a selected positive number satisfying  $N+1 \leq M$ ;
  - adding the supplement signal to the M-bit filtered signal to produce a modified filtered signal; and
  - removing L LSBs from the modified filtered signal to produce a dithered, filtered signal, where L is a selected positive number satisfying  $L+1 \leq M$ .
2. (original) The method of claim 1, further comprising choosing said integer  $M = 30$ .
3. (original) The method of claim 1, further comprising choosing said integer  $N = 16$ .
4. (original) The method of claim 1, further comprising choosing said integer L in a range  $1 \leq L \leq 16$ .
5. (original) The method of claim 1, further comprising providing said filtered signal as an FIR-filtered signal.
6. (previously presented) A system for adjusting a noise floor of a filtered signal for low frequencies, the system comprising a computer that is programmed:
  - to provide a digital signal, having M bits, that has been digitally filtered, where M is a selected positive number;

to form an EXclusive OR product of N least significant bits (LSBs) of the M-bit filtered signal, to provide a one-bit supplement signal, where N is a selected positive number satisfying  $N+1 \leq M$ ;

to add the supplement signal to the M-bit filtered signal to produce a modified filtered signal; and

to remove L LSBs from the modified filtered signal to produce a dithered, filtered signal, where L is a selected positive number satisfying  $L+1 \leq M$ .

7. (original) The system of claim 6, wherein said computer is further programmed to choose said integer  $M = 30$ .

8. (original) The system of claim 6, wherein said computer is further programmed to choose said integer  $N = 16$ .

9. (original) The system of claim 6, wherein said computer is further programmed to choose said integer L to lie in a range  $1 \leq L \leq 16$ .

10. (original) The system of claim 6, wherein said computer is further programmed to provide said filtered signal as an FIR-filtered signal.

11. (previously presented) An article of manufacture comprising:  
a computer usable medium having computer readable program code means embodied in the medium;

computer readable program code means for causing a computer to provide a digital signal, having M bits, that has been digitally filtered, where M is a selected positive number;

computer readable program code means for causing a computer to form an EXclusive OR product of N least significant bits (LSBs) of the M-bit filtered signal, to provide a one-bit supplement signal, where N is a selected positive number satisfying  $N+1 \leq M$ ;

computer readable program code means for causing a computer to add the supplement signal to the M-bit filtered signal to produce a modified filtered signal; and

computer readable program code means for causing a computer to remove  $L$  LSBs from the modified filtered signal to produce a dithered, filtered signal, where  $L$  is a selected positive number satisfying  $L+1 \leq M$ .

12. (original) The article of manufacture of claim 11, wherein at least one of said computer readable program code means chooses said integer  $M = 30$ .

13. (original) The article of manufacture of claim 11, wherein at least one of said computer readable program code means chooses said integer  $N = 16$ .

14. (original) The article of manufacture of claim 11, wherein at least one of said computer readable program code means chooses said integer  $L$  in a range  $1 \leq L \leq 16$ .

15. (original) The article of manufacture of claim 11, wherein at least one of said computer readable program code means provides said filtered signal as an FIR-filtered signal.